

May 13, 2016

REMEDIAL INVESTIGATION / FEASIBILITY STUDY

PROGRESS REPORT #2 FEBRUARY 2016 – APRIL 2016

Prepared for

**COLUMBIA FALLS ALUMINUM COMPANY, LLC
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1. Project Schedule

1.0 INTRODUCTION

This Progress Report (Report) presents a summary of activities completed during the period of February 2016 through April 2016, on behalf of Columbia Falls Aluminum Company, LLC (CFAC), for the Remedial Investigation / Feasibility Study (RI/FS) being performed at the Anaconda Aluminum Co Columbia Falls Reduction Plant (a/k/a Columbia Falls Aluminum Plant) generally located near Columbia Falls in Flathead County, Montana ("Site"). The RI/FS is being conducted pursuant to the Administrative Settlement Agreement and Order on Consent (AOC) dated November 30, 2015 between CFAC and the United States Environmental Protection Agency (USEPA) (CERCLA Docket No. 08-2016-0002).

This Report provides a description of the actions that have been taken to comply with the AOC during the reporting period and describes work planned for the upcoming reporting period, including an updated project schedule. This report also provides updates regarding the availability of any new, validated sampling data received by CFAC during the reporting period. Lastly, this Report provides an update on any scope revisions and/or project delays encountered and solutions implemented to address any changes.

2.0 WORK COMPLETED

This Section provides a summary of activities completed or ongoing between February and April 2016.

2.1 Subcontractor Procurement Activities

In February and March of 2016, Roux Associates and CFAC completed procurement of multiple subcontractors that will be utilized during the Phase I Site Characterization. The following subcontractors have been selected and contracted to perform work in support of the Phase 1 Site Characterization:

- ❑ Driller and Investigation-Derived Waste (IDW) Management – Cascade Drilling, L.P. (Federal Way, WA)
- ❑ Analytical Laboratory – TestAmerica Laboratories, Inc. (Edison, NJ)
- ❑ Data Validation – Laboratory Data Consultants, Inc. (Carlsbad, CA)
- ❑ Surveyor – Sands Surveying, Inc. (Kalispell, MT)
- ❑ Electrical Resistivity Geophysical Survey – Spectrum Geophysics (Chatsworth, CA)
- ❑ GPR Utility Mark-Outs and GPR Geophysical Survey – Shari A Johnson & Associates Engineering, PLLC (Somers, MT)
- ❑ Drilling and Sampling Field Support – Hydrometrics, Inc. (Helena, MT)
- ❑ Risk Assessment Support – EHS Support, LLC (Pittsburgh, PA)

Each of the subcontractors listed above will be managed throughout the work by Roux Associates. Roux Associate sand CFAC will provide updates to the USEPA in future progress reports regarding the hiring of any additional Subcontractors.

2.2 Lead Sampling and Analysis Plan Implementation and Reporting

Investigation activities associated with the Lead Sampling and Analysis Plan, prepared by Roux Associates and dated January 29, 2016, were implemented in February 2016. Soil samples were collected by Roux Associates' subcontractor Hydrometrics on February 10 and 12, 2016, and were submitted to Energy Labs in Billings, Montana for analysis.

A summary of the lead sampling and analysis work was provided to the USEPA in a draft letter report prepared by Roux Associates and dated March 2, 2016. The memorandum included a summary of the field activities completed, the samples collected, and an evaluation of the sampling results. The lead work indicated that none of lead delineation samples collected as part of the sampling activities contained lead at concentrations exceeding the RCRA TCLP limit. The results also indicated that preparation of plans for additional soil sampling, or removal of soil within the vicinity of the Paste Plant, were not necessary prior to the Paste Plant demolition. Based on the results of the lead investigation, the Paste Plant demolition was initiated by Calbag during April 2016.

2.3 Investigation Derived Waste Management Plan

As described in the RI/FS Work Plan, Roux Associates submitted a Draft Investigation-Derived Waste (IDW) Management Plan to the USEPA dated February 2, 2016. The IDW Management Plan described the approach to manage the various types of waste anticipated to be generated during project activities in order to comply with regulatory requirements and ensure protection of human health and the environment. All personnel (including all subcontractors) who handle, transport, store, and/or dispose of IDWs will be trained to comply with requirements set forth in the IDW Management Plan.

The USEPA provided written comments on the Draft IDW Management Plan via a letter from CDM Smith dated February 25, 2016. Roux Associates provided a response to the comments in a letter dated April 19, 2016. The MDEQ also provided written comments on the Draft IDW Management Plan via email correspondence. Preparation of a response to comments is ongoing and will be provided to USEPA during the next reporting period. A Revised IDW Management Plan will also be provided to USEPA during the next reporting period.

2.4 Additional Records Review

In February 2016, Roux Associates submitted a Freedom of Information Act (FOIA) request to various governmental agencies, including the USEPA, MDEQ, and U.S. Army Corp of Engineers (USACE). The FOIA request was completed in accordance with the additional records review scope of work described in the RI/FS Work Plan. The FOIA requested reports of environmental

investigations and remedial actions and any other issues pertinent to the assessment of environmental quality at the Site.

Roux Associates received a letter response from USEPA dated February 9, 2016. Roux Associates also received responses from MDEQ and USACE via email correspondences dated February 18, 2016 and March 8, 2016 respectively. The review of the responses and information provided by the various agencies is currently ongoing. A summary of the FOIA review, and any other additional records review, will be provided in the Phase I Site Characterization Summary Report and if needed, the CSM will be updated to include any potential relevant information.

2.5 Pre-intrusive Task 1 - Site Reconnaissance

Site reconnaissance activities were initiated by Roux Associates on Monday, April 4, 2016, and were completed on Friday, April 16, 2016. During the first week of Site reconnaissance, Roux Associates and CFAC personnel held various meetings, including:

- ❑ A project kickoff meeting conducted with USEPA, MDEQ, CFAC, Roux Associates, and CDM Smith on April 5, 2016 to discuss various items related to implementation of the Phase I Site Characterization scope of work (personnel, work scopes, schedule, etc.);
- ❑ A coordination meeting between Calbag and Roux Associates on April 6, 2016 to discuss and plan for implementation of work nearby the ongoing demolition activities being completed by Calbag;
- ❑ Two days of Site visits with Cascade Drilling on April 5 and 6, 2016 to discuss implementation of the Phase I drilling program, including access for drill rigs, IDW management, schedule, personnel, and equipment;
- ❑ An initial day of surveying with Sands Surveying on April 7, 2016 to set five control points at various locations around the Site to be utilized for future surveying events; and
- ❑ A coordination meeting between Shari Johnson Engineering and Roux Associates on April 7, 2016 to discuss the use of ground penetrating radar (GPR) technology as part of the Phase I Site Characterization field activities.

During the remainder of the Site reconnaissance, Roux Associates personnel visited Site features, existing well locations, and proposed drilling locations described in the RI/FS Work Plan and Phase I SAP. At each location where recon was performed, Roux Associates personnel inspected the area, observations were noted, and photographs were taken. A summary of the observations will be provided in the SAP Addendum, which will be submitted to the USEPA in May 2016.

Roux Associates personnel also performed reconnaissance of drainage structures located around the Main Plant area. At each drainage location inspected, Roux Associates personnel attempted to open the drainage structure utilizing hand tools. If the location was able to be opened, the structure was then gauged to determine the depth to the bottom of the structure and was also observed to assess if water was present in the structure. Additionally, any other observations were noted, including the presence of pipes in the structure. Samples were collected from four drainage structures that were able to be accessed. A summary of the drainage structure reconnaissance and sampling will be provided in the SAP Addendum to be submitted to the USEPA in May 2016.

2.6 Pre-Intrusive Task 2 - Geophysical Survey

Spectrum Geophysics, subcontractor to Roux Associates, was onsite from April 18, 2016 through April 22, 2016 to complete an electrical resistivity (ER) / induced polarization (IP) geophysical survey. The scope of work for the geophysical survey was described Geophysical Work Plan prepared by Spectrum Geophysics and dated March 23, 2016.

The objective of the ER / IP geophysical survey is to assess the lateral and vertical boundaries of the landfill materials in the northeastern portion of the Site, as well as to assess (and estimate the depth to) key lithologic interfaces in the northeastern and western portions of the site. These key interfaces include the landfills materials and underlying natural soils, the overburden and bedrock, and potentially significant water-bearing zones table.

Data collected during the survey will be reviewed by Spectrum Geophysics in May 2016. A summary report will be submitted to the USEPA in June 2016.

2.7 Pre-intrusive Task 3 - Soil Gas Investigation

Roux Associates personnel conducted field activities associated with the soil gas investigation between April 18, 2016 and April 26, 2016. The soil gas field work consisted of two elements: 1) field screening of landfill soil gas with a landfill gas meter and photo-ionization detector (PID) and 2) a passive soil gas investigation utilizing AGI Passive sampling devices. A description of the work associated with each element is described in Section 5.2.4 of the RI/FS Work Plan.

Roux Associates field personnel completed landfill gas screening at four locations within the Wet Scrubber Sludge Pond and two locations within the Center Landfill. Roux Associates personnel also screened ten existing landfill vents present in the West Landfill. Results of the screening activities completed will be summarized in the SAP Addendum to be submitted to the USEPA in May 2016.

Amplified Geochemical Imaging, LLC (AGI) passive sampling devices were installed by Roux Associates personnel in eight locations within the Former Drum Storage Area and two locations within the former operational area. The AGI samples were left in the ground for approximately four to five days in accordance with the directions received from AGI. The devices were then retrieved by Roux Associates personnel and sent to AGI under chain of custody. Results of the AGI passive sampling will be summarized in the SAP Addendum, to be submitted to USEPA in May 2016.

Modifications to the landfill gas screening and AGI passive sampling scope of work area are described in Section 5.0.

2.8 SAP Addendum

Roux Associates began preparation of the SAP Addendum in April 2016. The purpose of the SAP Addendum is to present the results of Site reconnaissance activities completed in April 2016 and to provide a summary of the proposed modifications to the Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) provided in the Phase I Site Characterization Sampling and Analysis Plan (SAP). The SAP Addendum will be submitted to the USEPA in May 2016.

3.0 WORK PLANNED FOR NEXT REPORTING PERIOD

This Section summarizes the work planned for the next reporting period.

3.1 Site Preparation in Advance of Drilling Activities

Cascade Drilling (Drilling Subcontractor) will be onsite in advance of the start of drilling activities to complete Site preparation activities. The work will include clearing of vegetation and grading of land to allow for access of drill rigs in select drilling locations observed during Site reconnaissance. The Site preparation will also include preparation of the investigation-derived waste staging area in the warehouse building and staging of drilling equipment and materials.

Shari Johnson Engineering (GPR Subcontractor) will also be onsite in advance of the start of drilling activities to perform utility mark-outs in selected areas where drilling will be completed. The locations where the utility mark-outs will be completed will be selected based on Site reconnaissance observations and the potential presence of known, or potentially unknown, utilities.

3.2 Screening Level Ecological Risk Assessment (SLERA) Field Reconnaissance

Roux Associates' SLERA Manager and EHS Support (Risk Assessment Subcontractor) are planned to be on Site from May 2, 2016 through May 6, 2016 to conduct field activities associated with the SLERA. Field activities will include Site inspections to evaluate potential biological activity and habitats around the Site. Results of the SLERA field work will be presented in the SLERA Summary Report to be submitted with the Phase I Site Characterization Summary Report.

3.3 Phase I Site Characterization Drilling Scope of Work

Drilling of soil borings, installation of monitoring wells, and soil sampling activities associated with the Phase I Site Characterization scope of work will begin in May 2016. The drilling and sampling work will be completed in accordance with procedures described in the RI/FS Work Plan, Phase I SAP, and the SAP Addendum. The drilling work will be completed by Roux Associates field personnel in cooperation with Cascade Drilling (Subcontractor). Future progress reports will discuss progress of the drilling scope of work, including a review of locations completed, a summary of samples collected, schedule, and any deviations from the Phase I SAP and the SAP Addendum.

Management of IDW generated during the drilling scope of work will be conducted concurrently during the drilling. The IDW will be managed by Roux Associates, and supported by Cascade Drilling (Subcontractor), in accordance with the Revised IDW Management Plan to be submitted to the USEPA during the next reporting period.

4.0 DATABASE UPDATES

No analytical data was validated during the months of February 2016 through April 2016; therefore no analytical data was added to the project database.

Analytical data from sampling of drainage structures during Site Reconnaissance were received from the laboratory (TestAmerica) on April 26, 2016. Results were sent for third-party data validation at the end of April 2016. Upon receipt of the validated data, Roux Associates will load the data to the project database and validated data will be provided in the subsequent progress report.

On January 26, 2016, Roux Associates submitted a request via email correspondence to the USEPA regarding obtaining a copy of the laboratory Electronic Data Deliverables (EDDs) from the USEPA Site Reassessment Report submitted by Weston Solutions on behalf of the USEPA in 2014. The data in EDD format was provided to Roux Associates via email correspondence in April 2016. Processing of the data for entry into the project database will be completed in May 2016.

5.0 SCOPE/SCHEDULE REVISIONS

Two modifications were made to the soil gas investigation scope of work. The AGI samples within the Former Fueling Area (i.e., UST area) were unable to be taken, as described via email correspondence from Roux Associates to the USEPA dated April 29, 2016. Screening of landfill gas was unable to be conducted in the Industrial and Sanitary landfills, which will be summarized in email correspondence to USEPA in May 2016. The changes will also be documented in the SAP Addendum to be submitted in May 2016.

No changes to the overall schedule are expected at this time as a result of the activities completed in February through April 2016. The current Phase I Site Characterization schedule is attached to this Progress Report.

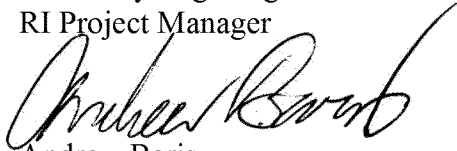
On behalf of CFAC, Roux Associates will continue to pursue the overall objectives described in the AOC and the RI/FS Work Plan. Roux Associates will continue to inform the USEPA of completed and upcoming activities pursuant to the requirements of the AOC in future progress reports.

Respectfully submitted,

ROUX ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Michael Ritorto".

Michael Ritorto
Senior Hydrogeologist
RI Project Manager

A handwritten signature in black ink, appearing to read "Andrew Baris".

Andrew Baris
Vice President / Principal Hydrogeologist
RI/FS Project Manager

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Remedial Investigation / Feasibility Study (RI/FS)
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Project Schedule

